

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
21 July 2005 (21.07.2005)

PCT

(10) International Publication Number  
**WO 2005/066374 A1**

(51) International Patent Classification<sup>7</sup>: C13K 1/06,  
C08B 30/12

(21) International Application Number:  
PCT/FI2005/000004

(22) International Filing Date: 4 January 2005 (04.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
20040005 5 January 2004 (05.01.2004) FI

(71) Applicant (for all designated States except US): KEMIRA  
OYJ [FI/FI]; Porkkalankatu 3, FI-00180 Helsinki (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MYLLYMÄKI,  
Vesa [FI/FI]; Vatakuja 1 A 9, FI-00200 Helsinki (FI). AK-  
SELA, Reijo [FI/FI]; Soukan Rannantie 8 C 27, FI-02360  
Espoo (FI).

(74) Agent: BERGGREN OY AB; P.O. Box 16 (Jaakonkatu 3  
A), FI-00101 Helsinki (FI).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: DEPOLYMERIZATION METHOD

(57) Abstract: The invention relates to a method for depolymerizing starch comprising mixing a starch material with an ionic liquid solvent to dissolve the starch, and then treating the dissolved starch by agitating at a temperature and for a period for time to effect depolymerization of the starch into desired depolymerization products.

WO 2005/066374 A1